

REMARKS

Claims 1 and 3-12 currently appear in this application. The Office Action of May 15, 2007, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Interviews

Applicant's attorney wishes to thank Examiner Kiliman for the courtesies extended during the telephone interview of September 24 and 26, 2007.

During the September 24 interview, Examiner Kiliman requested that the type of percentage of the copper and zinc be inserted into the claims, consistent with the disclosure in the specification. Accordingly, the amounts of copper and zinc are recited as wt%. Support for this can be found in the specification as filed at page 5, lines 20-22.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tundermann, US 3,941,584 in view of Levine, US 4,321,087. This rejection is respectfully traversed.

It is respectfully submitted that copper-based metal flakes made according to the herein claimed method are different from the article obtained by another method. Tundermann produces metal flake powders of an alloy by ball milling the metal or alloy in a liquid to produce a fine powder. There is nothing in Tundermann about producing the alloy in the form of particles. Levine adds nothing to Tundermann, because Levine discloses depositing a metal coating by vaporizing metal onto a release sheet. There is nothing in Levine that teaches or suggest that an alloy can be deposited onto the release sheet. Levine only discloses vaporizing aluminum, copper and chromium, none of which is evaporated to form an alloy on the release coating.

Submitted herewith is the declaration of Wolfgang Herzing, a co-inventor of the present application. Dr. Herzing states that evaporating two materials with different evaporation temperatures for one vessel, as suggested in the cited art, results in the more volatile component evaporating before the other component begins evaporating (Raoult's Law). For a mixture of copper and zinc, the zinc will all evaporate before the copper evaporates. The zinc content of the vapor phase is much higher than desired, and the deposited layer will not be homogeneous. The resulting particles have unacceptable variations in colors and physical properties.

Likewise, flash evaporation is not feasible for making particles as claimed herein. Because the evaporation temperatures of copper and zinc different by approximately 1000°C, zinc will evaporate from radiant heat before it even reaches the evaporation zone.

The pigments claimed herein are made by evaporating the components separately so that the alloy produced has a defined and consistent composition of both components.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.  
Attorneys for Applicant

By: /Anne M. Kornbau/  
Anne M. Kornbau  
Registration No. 25,884

AMK:srd  
Telephone No.: (202) 628-5197  
Facsimile No.: (202) 737-3528  
G:\BN\R\rau\Schuster2\pto\2007-09-27AMD.doc